

EXHIBIT 3

FILED UNDER SEAL

Bernanke experiment analysis (THIS IS THE INTERNAL TO GTRADE DOC NOT TO BE SHARED!)

[REDACTED]

Note: The results in this doc are not up to date

Summary

- Project Bernanke involves reducing the second price and increasing the first price of the two bids submitted by GDN to the AdX auction in such a way that publishers receive fair payout (e.g. GDN margin remains constant) and GDN profit is maximized.
- The optimal and fair combination of first bid increase and second bid decrease for each publisher is estimated using AdX auction simulations, using an auction simulation code written by GTrade (more details below).
- We are currently [REDACTED].
- We see good trends in most important metrics. Matched queries, Google revenue, publisher payout increase by [REDACTED] Google profit increases [REDACTED] GDN revenue and GDN profit increase by [REDACTED] respectively.
- AdX buyers lose about [REDACTED] queries and [REDACTED] spend.
- Total RPM [REDACTED]. [REDACTED] publishers see a total RPM [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
- Effect on advertisers TBD. [REDACTED]
[REDACTED] [REDACTED] [REDACTED]
[REDACTED]

Bernanke methodology

The current match rate on AdX (i.e., queries where there is a winning ad) is about [REDACTED]. The primary reason for the low match rate are the reserve prices set by the publisher, which need to be beat for an ad to win the auction. GDN has historically submitted two bids to the AdX auction. Analysis shows that on queries won by GDN, GDN second prices itself [REDACTED] of the time. If GDN were to only submit one bid, the publishers will only receive [REDACTED] of their current payout. As part of project Project Bernanke, we reduce the second bid (and in some cases drop the second bid completely) and create a pool of money, which we then reinvest by increasing the first bid on queries in order to win potentially unmatched queries. This is done in such a way that GDN profit is maximized while also ensuring fair GDN payout to the exchange/ publisher. Here, fairness is defined as ensuring the desired margin on the GDN payout. For instance, for non-video requests, this implies [REDACTED]. (It is to be noted that this margin of [REDACTED] is to be achieved in aggregate over some number of queries/ period of time. This is similar to [REDACTED].)

As mentioned above, project Bernanke involves reducing the second price and increasing the first price of the two bids submitted by GDN to the AdX auction in such a way that publishers receive fair payout and GDN profit is maximized. The optimal combination of first bid increase and second bid decrease for each publisher is estimated using AdX auction simulations. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

This document summarizes the results of the Bernanke experiments, and provides a discussion of the results and other relevant issues.

Analysis Summary

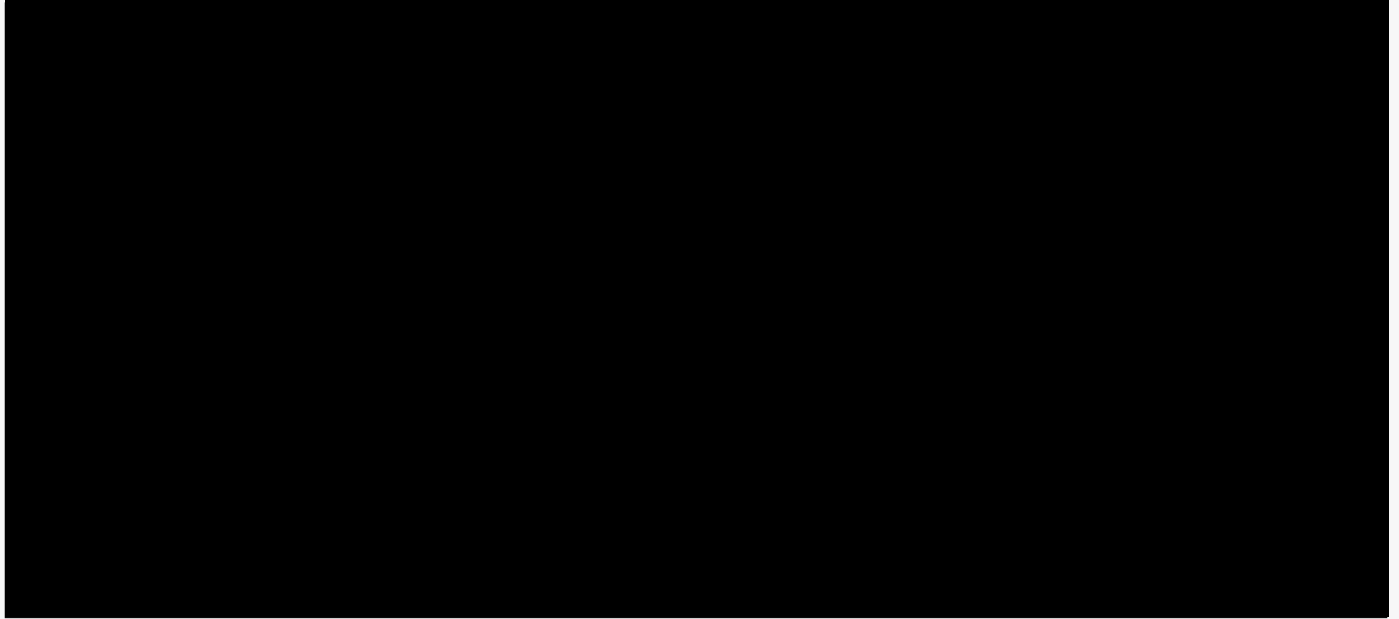
[REDACTED]

[REDACTED]

[REDACTED], 2013-08-24 to 2013-08-25

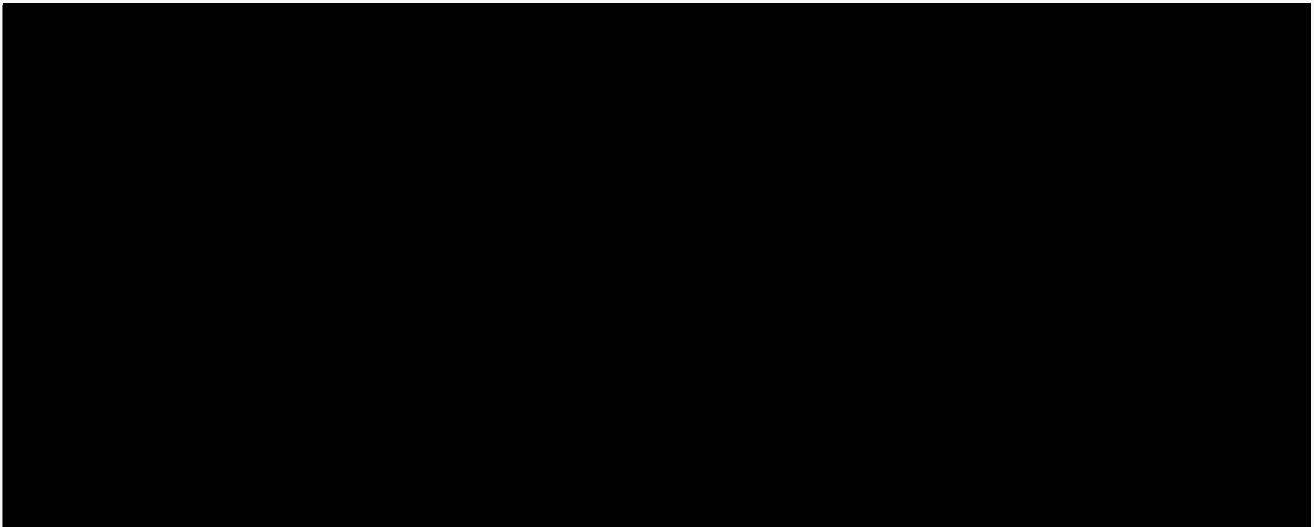
Notations:

[REDACTED]



GDN margin analysis

[REDACTED]
[REDACTED]. The desired GDN margin is expected to be [REDACTED] ([REDACTED] for non-video ads and [REDACTED] for video requests) . [REDACTED]
[REDACTED]
[REDACTED].



[REDACTED]

[REDACTED]

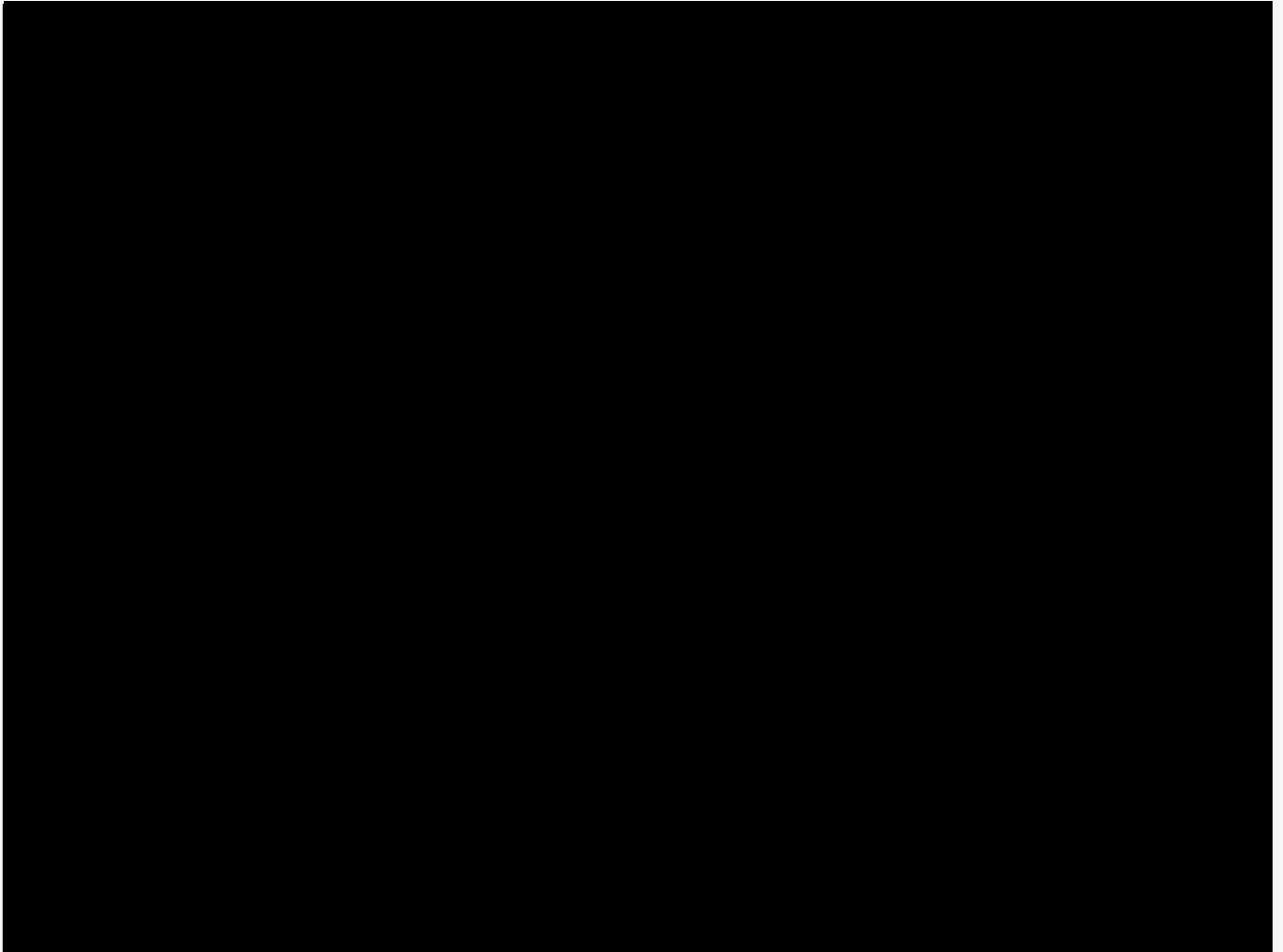
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[REDACTED]

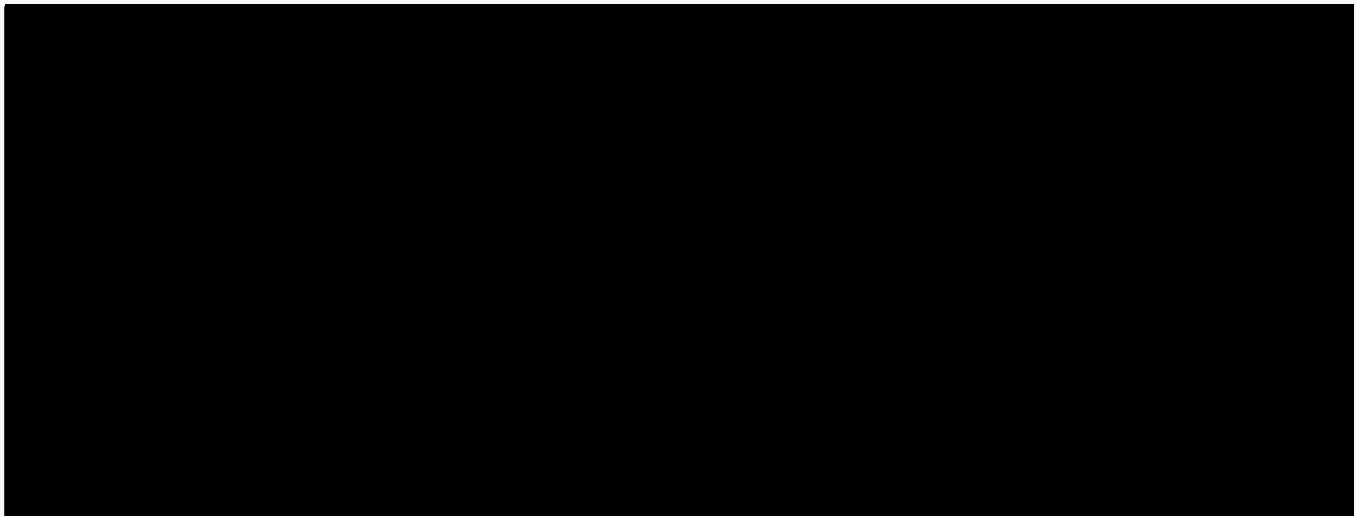
[REDACTED]

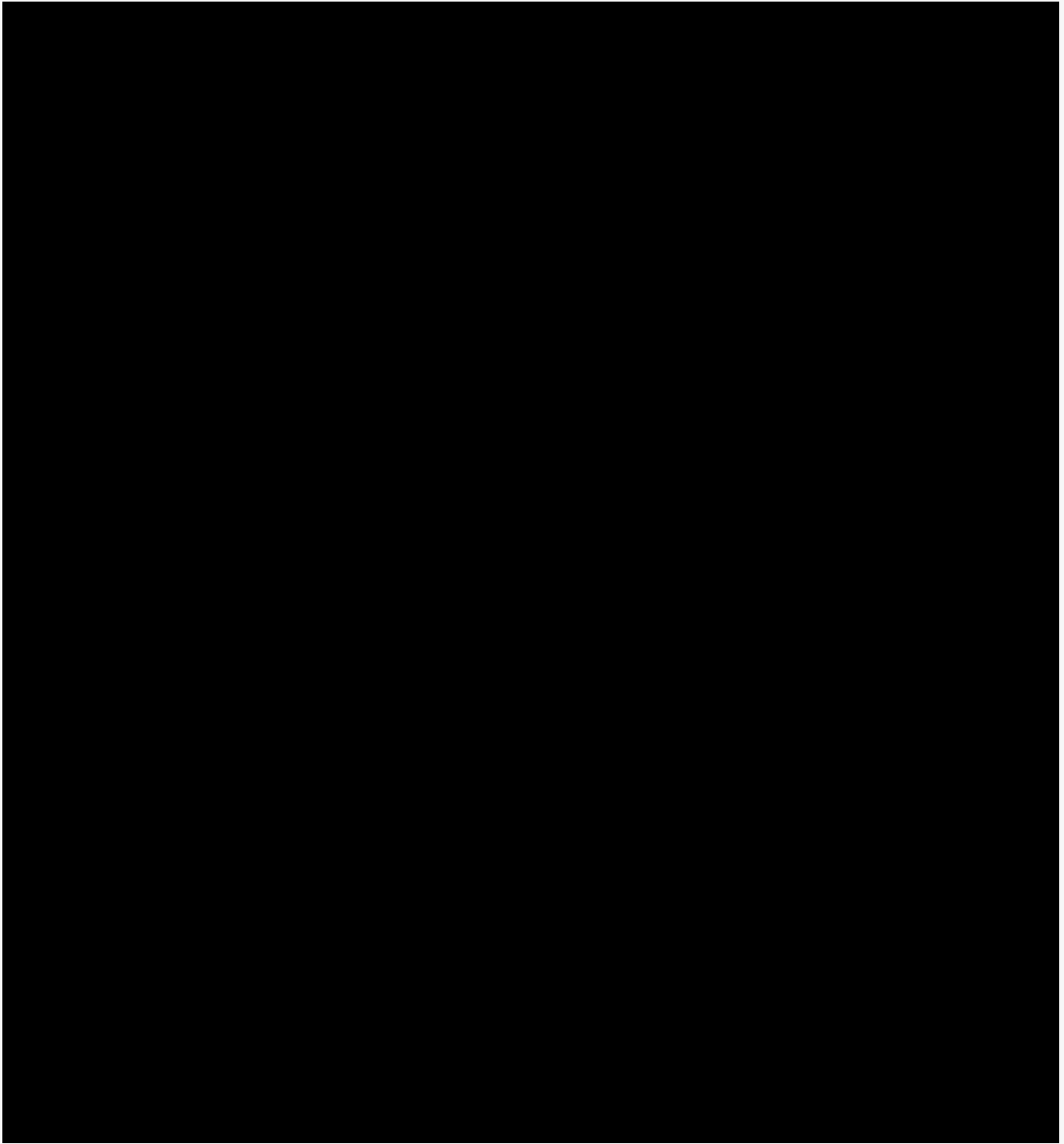
Publisher RPM analysis

The Bernanke experiments [REDACTED]



[REDACTED]





[REDACTED]

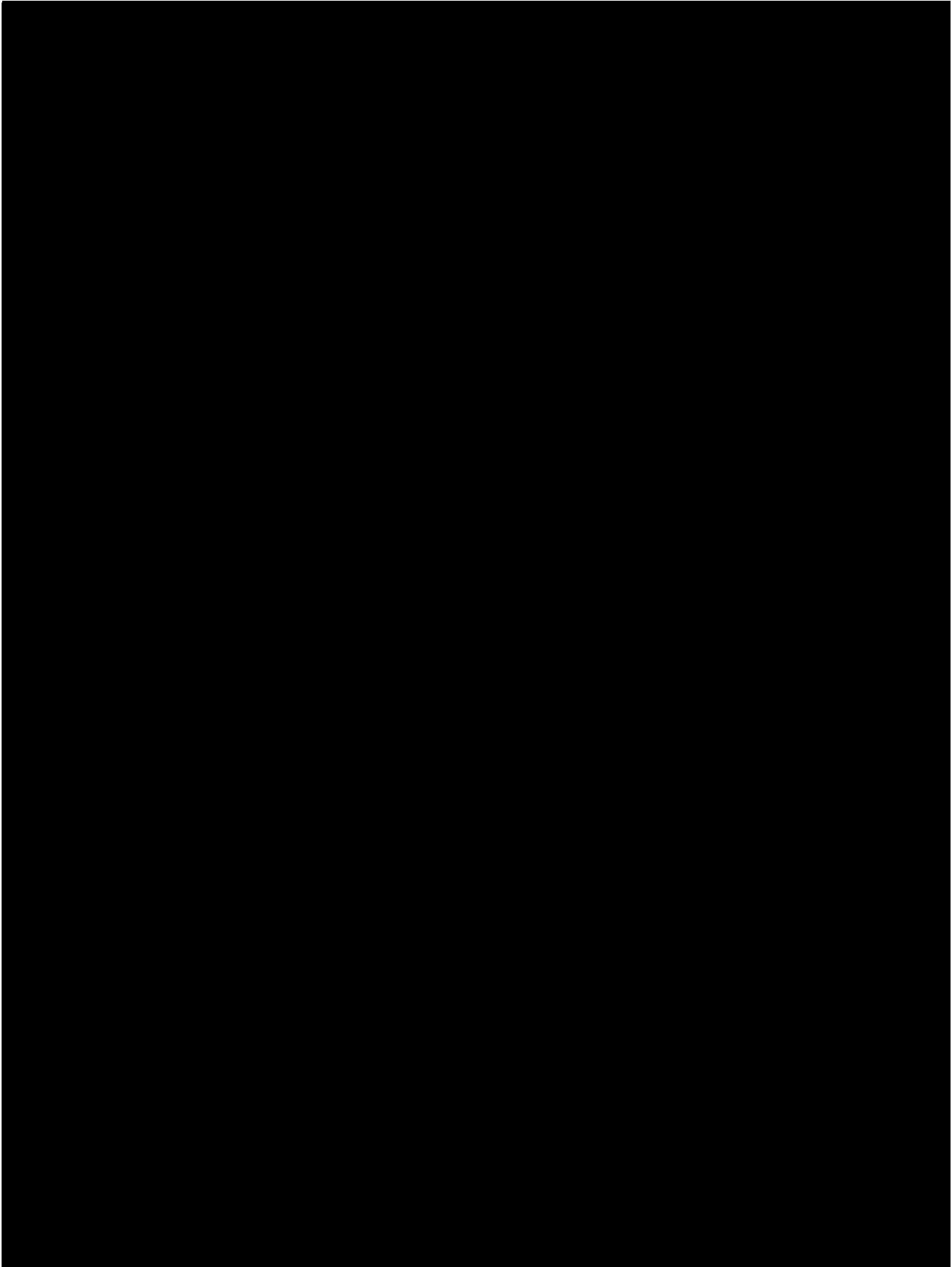


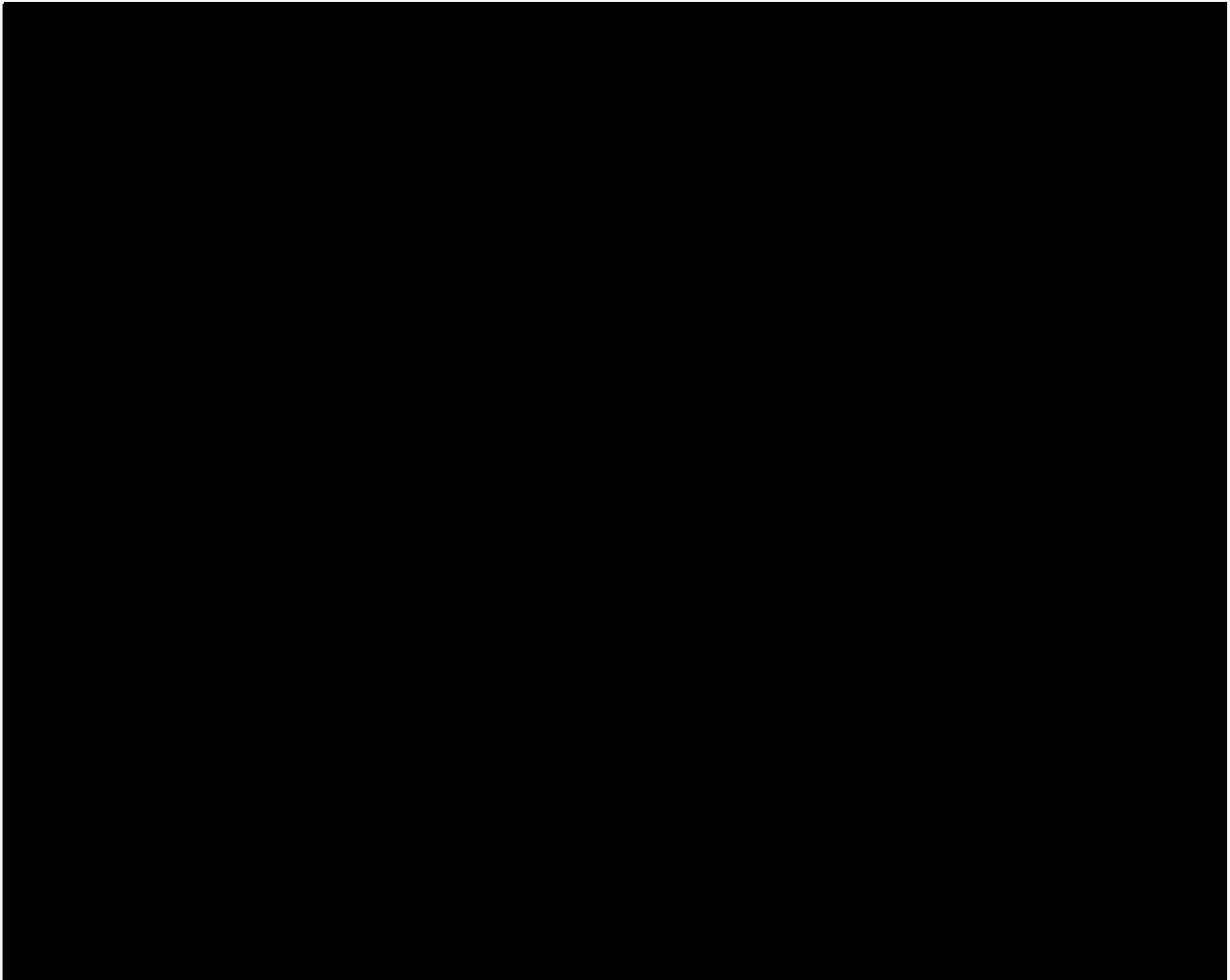
[Redacted text line]

[Redacted text line]

Appendix

Tabulated results:





Comments in earlier doc

- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]